area on the east shore of the Phillips River estuary, 4 miles west), Esperance and Israelite Bay. In the Hopetoun district a fishing community was established at the 12-miles beach, opposite the Jerdacuttup Lakes, in 1944, and in October 1947 I found one fresh *Helix pisana* there, the first I had seen after several visits; it had evidently been transported thither in the fishermen's gear.

My experience, so far as it goes, is thus corroborative of the distribution already published by P. H. Fischer *(Journal de Conchyliologie,* vol. 82, 1939, p. 250), who recorded the snail "dans certaines localites cotieres entre Geraldton et Euela."

NOTES ON THE LEAFLESS ORCHID
Caladenia aphylla Bentham

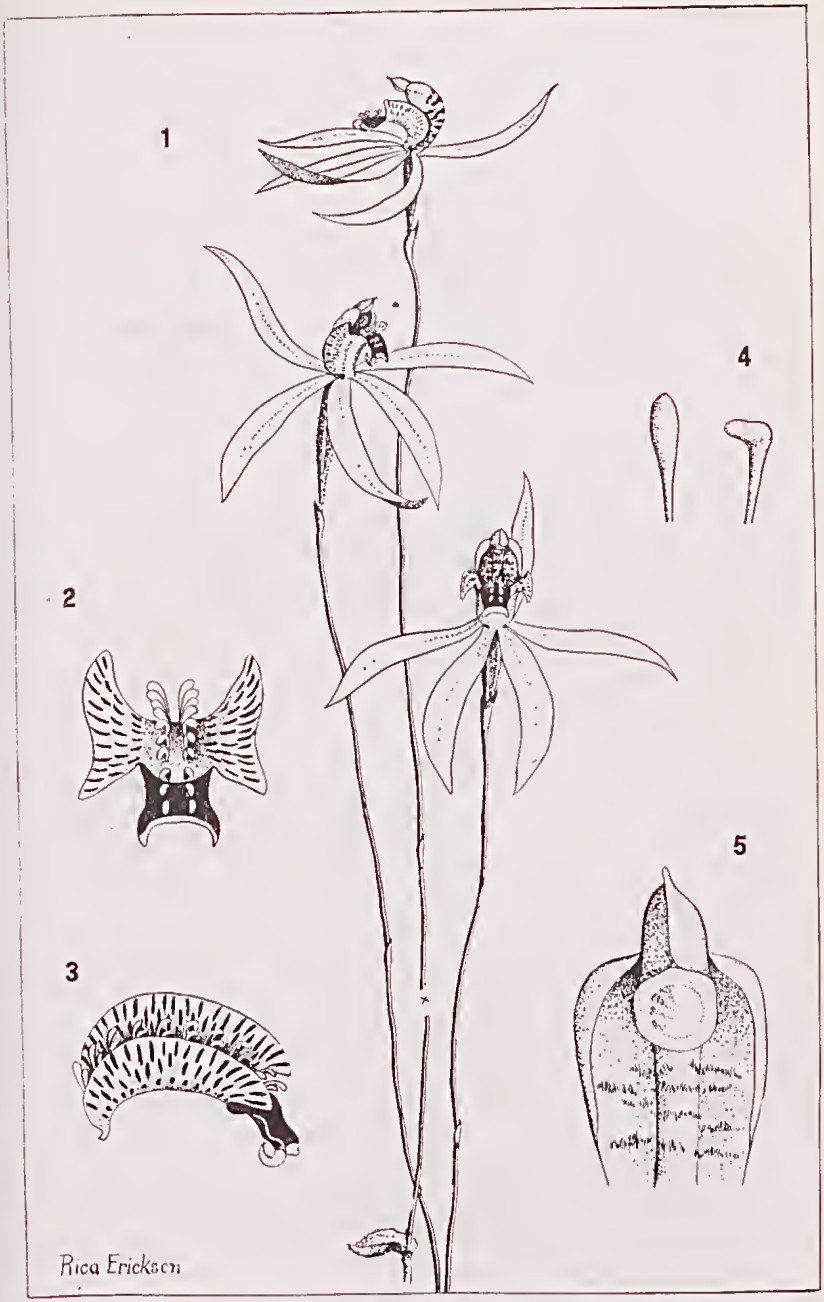
By Mrs. RICA ERICKSON, Bolgart

March is an unusual month for a bush plant to flower, but that is not the only extraordinary feature of *Caladenia aphylla.* As its name implies it is leafless, at least at the time of flowering. Look for it during March and April and you may be fortunate enough to find some flowers still retaining their dried and shrivelled leaves at the stems' bases. Apparently the leaf develops in spring, dies in summer and decays before the flower blooms. Those I have found are a little longer than broad and are the size of a small finger nail.

The range of this orchid is fairly extensive. My personal acquaintance with it is confined to two localities, Tunney (about 20 miles north of Cranbrook) and Young's Siding (between Albany and Denmark). Flowering in both places took place in late March and April. The late Colonel B. T. Goadby gave me the following list of localities for the species: Collie, Bunbury, Yallingup, Albany, Hay River, Kalgan River, Porongorups, Mount Barren, Cranbrook, Mondurup (the third highest peak in the Stirling Range).

Mrs. E. H. Pelloe's *West Australian Orchids* (1930) includes some of these and adds Tukurua. A friend of mine, who though without botanical pretensions, is positive it may be found at Harvey and I am willing to accept that item, as the flowering date and leafless condition of the plant are both unusual. Near the coast the orchid grows well in sandy soil near stunted jarrahs. Here is the best place to look for the dry leaves. Inland it prefers clay ridges among mallee and prickly scrub. But since few people expect to see orchids before the winter rains it is not often noticed.

The delicate and beautiful flower is about two inches across on a slender, smooth stem about twelve inches tall. It shines like a creamy star. The five perianth segments are nearly equal, slender and tapering. The outer surfaces are dusted brown so that the buds are dusky and scarcely visible. The clear neatness of the unfringed labellum is arresting. It is deeply three-lobed. The spotted lateral lobes curve forward and are upright to form a tube with the column. The projecting middle lobe is rich violet with a recurved tip of yellow. The yellow calli are clublike and arranged in two rows. The base of the labellum is furnished with a claw on which it may be



Caladenia aphylla Benth.

1. Three views of the plant; a dead leaf is shown at base of one stem.
2. View of labellum from above.
3. Side view of labellum.
4. Calli from base and tip of labellum.
5. Top of column showing stigma and anthers.

swung as on a hinge. The column is winged and curved—spotted with purple and crimson.

The insect which pollinates the Leafless Orchid is a mystery. The claw of the labellum suggests that the insect alights on the tip of the middle lobe and thus weighs down the labellum, opening wide the tube to the heart of the flower. The clubbed calli offer firm foot grips and the insect moves forward. As it does so it passes the point of equilibrium of the balanced labellum, and its own weight pulls the labellum closer against the column. When the insect backs out that balancing point is reached much nearer the tip of the labellum since the insect's weight holds it close to the column. It is only after the insect brushes past the stigma and the anthers that the labellum swings open again, freeing the insect for flight to another flower. As its back touches the stigma it deposits there any pollinia it may bear. Walking backwards further it will brush past the anthers and collect from them another pollinia ready for the next orchid visited.

This is the way that small native bees *(Euryglossa rejecta)* pollinate *Caladenia filamentosa* and thus have I seen flies pollinate *Caladenia Patersonii*. Both these orchids have a claw and hinged labellum. But they call for the exact agent since one too small will escape without accomplishing the flower's desires and one too heavy will remain a prisoner.

FROM FIELD AND STUDY

Thornbill Notes.—Mr. Sedgwick's note on the distribution of the Chestnut-tailed Thornbill in the April issue of the *Naturalist* prompts me to add an observation that adds extensively to its range as given in Serventy and Whittell's *Birds of Western Australia*. The bird was observed at Bolgart, foraging in jam thickets in company with Weebills, Brown Thornbills, Grey Fantails and Red-capped Robins.

The Brown Thornbill deceived me while I was intent on tracing some Rufous Whistlers. It whistled one of their notes, "sweet, swt-swt-swt," more faintly but a perfect copy of the Whistlers, which were using the same notes nearby.

—(Mrs.) RICA ERICKSON, "Fairlea," Bolgart.

How Young Ducks Leave Elevated Nests.—On September 9, 1946 Mr. Frank Paterson, of Coolup, described to me the first and only instance he had seen of a Black Duck *(Anas poecilorhyncha)* bringing its young down from a nest in a hollow tree. He had just witnessed the incident. He was broadcasting superphosphate in a cleared field with a few scattered trees when he noticed a duck fly down to the ground from a nesting hollow. The bird walked about on the ground at the base of the tree calling and he was amazed to see the little ducklings one after another fall down from the hollow. He was some 40 or 50 yards away when the duck flew down but when the last duckling arrived on the ground